Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the above-identified application:

Listing of Claims

1. (Previously presented) A method of determining whether an individual has or is at risk for developing Usher syndrome Type IIa, the method comprising:

obtaining a biological sample from the individual, wherein the biological sample is from a tissue that normally includes the usherin protein in an individual not having Usher syndrome Type IIa;

incubating the biological sample with at least one antibody which is immunoreactive with at least a portion of a human usherin protein having SEQ ID NO:4 under conditions effective to produce an immunoconjugate if the usherin protein is present, wherein the at least one antibody which is immunoreactive with at least a portion of a human usherin protein having SEQ ID NO:4 does not cross-react with other non-usherin proteins within the biological sample;

evaluating for the presence or absence of the immunoconjugate; and

correlating the presence of the immunoconjugate with the individual not having Usher syndrome Type IIa, and the absence of the immunoconjugate with the individual having or being at risk for developing Usher syndrome Type IIa.

2. (Previously Presented) The method of claim 1 wherein the biological sample is selected from the group consisting of at least a portion of testis, cochlea, epididymus, ovary, eye, uterus, heart, pancreas, prostate, skin, placenta, spleen, submaxillary gland, small intestine, large intestine, blood vessels, and combinations thereof.

3. (Original) The method of claim 1 wherein the at least one antibody is detectably labeled.

4. (Original) The method of claim 3 wherein the detectable label is selected from the group consisting of radioactive labels, non-radioactive labels, and combinations thereof.

5. (Original) The method of claim 1 wherein the antibody is a monoclonal antibody, a polyclonal antibody, or combinations thereof.

6. (Original) The method of claim 1 wherein the antibody is immunoreactive with a polypeptide selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:4, and combinations thereof.

7. (Original) The method of claim 1 wherein the polynucleotide encoding the usherin protein is represented by SEQ ID NO:3.

8. (Previously presented) A method for detecting the presence or absence of an usherin protein, the method comprising:

obtaining a biological sample, wherein the biological sample is from a tissue that normally includes the usherin protein in an individual not having Usher syndrome Type IIa;

incubating the biological sample with at least one antibody which is immunoreactive with at least a portion of a human usherin protein having SEQ ID NO:4 under conditions effective to produce an immunoconjugate if the usherin protein is present, wherein the at least one antibody which is immunoreactive with at least a portion of a human usherin protein having SEQ ID NO:4 does not cross-react with other non-usherin proteins within the biological sample;

evaluating for the presence or absence of the immunoconjugate;

correlating the presence of the immunoconjugate with the presence of usherin protein, and the absence of the immunoconjugate with the absence of the usherin protein.

9. (Original) The method of claim 8 wherein the biological sample is selected from the group consisting of at least a portion of testis, cochlea, epididymus, ovary, eye, uterus, heart, pancreas, prostate, skin, placenta, spleen, submaxillary gland, small intestine, large intestine, blood vessels, and combinations thereof.

10. (Original) The method of claim 8 wherein the antibody is detectably labeled.

11. (Original) The method of claim 10 wherein the detectable label is selected from the group consisting of radioactive labels, non-radioactive labels, and combinations thereof.

12. (Original) The method of claim 8 wherein the antibody is a monoclonal antibody, polyclonal antibody, or combinations thereof.

13. (Original) The method of claim 8 wherein the antibody is immunoreactive with a polypeptide selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:4, and combinations thereof.

14. (Original) The method of claim 8 wherein the polynucleotide encoding the usherin protein is represented by SEQ ID NO:3.

15. (Previously presented) A method of determining whether an individual has or is at risk for developing Usher syndrome Type IIa, the method comprising:

obtaining a biological sample from the individual, wherein the biological sample is from a tissue that normally includes the usherin protein in an individual not having Usher syndrome Type IIa;

incubating the biological sample with a first antibody and a second antibody that are immunoreactive with at least a portion of a human usherin protein having SEQ ID NO:4 under conditions effective to produce an immunoconjugate if the usherin protein is present,

wherein the at least one antibody which is immunoreactive with at least a portion of a human usherin protein having SEQ ID NO:4 does not cross-react with other non-usherin proteins within the biological sample;

evaluating for the presence or absence of the immunoconjugate; and

correlating the presence of the immunoconjugate with the individual not having Usher syndrome Type IIa, and the absence of the immunoconjugate with the individual having or being at risk for developing Usher syndrome Type IIa.

16. (Original) The method of claim 15 wherein the immunoconjugate is a sandwich comprising the first antibody, the second antibody, and the human usherin protein.

17. (Original) The method of claim 15 wherein either the first antibody or the second antibody has an attached detectable label.

18. (Original) The method of claim 17 wherein the detectable label is selected from the group consisting of radioactive labels, non-radioactive labels, and combinations thereof.

19. (Original) The method of claim 15 wherein at least one of the first or second antibody is a monoclonal antibody.

20. (Original) The method of claim 15 wherein the first antibody is a monoclonal antibody attached to a solid surface and the second antibody is a polyclonal antibody with an attached detectable label.

21. (Original) The method of claim 20 wherein the detectable label is selected from the group consisting of radioactive labels, and non-radioactive labels, and combinations thereof.

22. (Original) The method of claim 15 wherein the first or second antibody is immunoreactive with a polypeptide selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:4, and combinations thereof.

23. (Original) The method of claim 15 wherein the polynucleotide encoding the usherin protein is represented by SEQ ID NO:3.

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